

***In the Claims:***

Please amend the claims as follows.

The following lists all claims and their status:

1-302 (cancelled)

303. (currently amended) A method of assessing wall thickness of human heart tissue, comprising:

providing at least one image of heart tissue from a human heart to a computer system; and

assessing wall thickness of the heart tissue by using the computer system to assess a contrast between at least two sections in at least one image.

304. (currently amended) The method of claim 303, wherein the computer system divides at least one of the images into a plurality of images.

305. (original) The method of claim 303, wherein the computer system uses the contrast of at least one of the sections to assess wall thickness in or proximate to at least one of the sections.

306. (currently amended) The method of claim 303, further comprising:

providing at least two images of human heart tissue to the computer system; and

using at least two of the images of heart tissue to create at least a second image of human heart tissue, wherein at least a portion of the second image appears at least three-dimensional.

307. (currently amended) The method of claim 303, further comprising creating a second image of human heart tissue, wherein the second image depicts at least one of the two sections on the image.

308. (cancelled)

309. (currently amended) The method of claim 303, further comprising creating a report comprising at least a second image of human heart tissue, wherein at least a portion of the second image appears at least three-dimensional, wherein the second image is divided into parts based on the contrast of the sections.

310. (original) The method of claim 303, further comprising using the computer system to assess a viability of at least a portion of the heart tissue using the assessed wall thickness.

311. (currently amended) A system configured to assess wall thickness of human heart tissue, comprising:

a CPU; and

a system memory coupled to the CPU, wherein the system memory stores one or more computer programs executable by the CPU;

wherein one or more computer programs are executable to:

provide at least one image of heart tissue from a human heart; to a computer system and

assess wall thickness of the heart tissue by using the computer system to assess a contrast between at least two sections in at least one image.

312-494 (cancelled)

495. (new) The method of claim 303, further comprising using the computer system to assess a viability of at least a portion of the heart tissue using the assessed wall thickness comprising:

- providing at least two images of human heart tissue to the computer system, wherein at least a first image comprises human heart tissue in a substantially diastolic state, and wherein at least a second image comprises human heart tissue in a substantially systolic state;

- assessing a first wall thickness of the human heart tissue by using the computer system to assess a contrast between at least two sections in at least the first image; and

- assessing a second wall thickness of the human heart tissue by using the computer system to assess a contrast between at least two sections in at least the second image.

496. (new) The method of claim 303, further comprising using the computer system to assess a viability of at least a portion of the heart tissue using the assessed wall thickness comprising:

- providing at least two images of human heart tissue to the computer system, wherein at least a first image comprises human heart tissue in a substantially diastolic state, and wherein at least a second image comprises human heart tissue in a substantially systolic state;

- assessing a first wall thickness of the human heart tissue by using the computer system to assess a contrast between at least two sections in at least the first image;

- assessing a second wall thickness of the human heart tissue by using the

computer system to assess a contrast between at least two sections in at least the second image; and  
comparing the first wall thickness to the second wall thickness.

497. (new) A method of assessing viability of human heart tissue, comprising:

providing at least two images of human heart tissue to the computer system, wherein at least a first image comprises human heart tissue in a substantially diastolic state, and wherein at least a second image comprises human heart tissue in a substantially systolic state;

assessing a first wall thickness of the human heart tissue by using the computer system to assess a contrast between at least two sections in at least the first image;

assessing a second wall thickness of the human heart tissue by using the computer system to assess a contrast between at least two sections in at least the second image; and  
comparing the first wall thickness to the second wall thickness.

498. (new) The method of claim 497, wherein the computer system divides at least one of the images into a plurality of images.

499. (new) The method of claim 497, wherein the computer system uses the contrast of at least one of the sections to assess wall thickness in or proximate to at least one of the sections.

500. (new) The method of claim 497, further comprising using at least two of the images of human heart tissue to create at least a third image of human heart tissue, wherein at least a portion of the third image appears at least three-dimensional.

501. (new) The method of claim 497, further comprising creating a third image of human heart tissue, wherein the third image depicts at least one of the two sections on the image.

502. (new) The method of claim 497, further comprising creating a report comprising at least a third image of human heart tissue, wherein at least a portion of the third image appears at least three-dimensional, wherein the third image is divided into parts based on the contrast of the sections.

503. (new) The method of claim 497, further comprising using the computer system to assess a viability of at least a portion of the human heart tissue using at least the first and second assessed wall thicknesses.